



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 1307

**Submitting author:** Dr Leung Yuk Yan, Rock

**Post title:** Associate Consultant, QMH, HKWC

### **Enhancing Efficiency of Queen Mary Hospital Blood Bank by Advanced Blood Issue to Integrated Ambulatory Center**

*Leung RYY (1), Tang FYC (2), Lee WM (2), Chung SM (1), Chun HS (1), Choy F (1), Pang W (3), Lam CCK (1)*

*(1) Division of Haematology, Department of Pathology, (2) Integrated Ambulatory Center, (3) Supporting Service, Queen Mary Hospital*

#### **Keywords:**

Integrated Ambulatory Center

Blood Bank

Blood Transfusion

Advanced Blood Issue

Efficiency

Porter

#### **Introduction**

High volume of transfusion activity in the Integrated Ambulatory Center (IAC) in Queen Mary Hospital has been observed. Majority of the requests of blood and components collection was made to the Hospital Blood Bank (BB) during peak hours, resulting in long queuing time at blood bank. Delayed delivery of blood component would result in less than optimal patient flow and lengthy stay in hospital for the sake of transfusion.

#### **Objectives**

To develop a mechanism to allow advanced blood issue a day before patient's admission for transfusion at IAC.

#### **Methodology**

After discussion with the stakeholders in IAC, BB and Supporting Service Section, the blood issue workflow was re-engineered, incorporating a new communication mechanism. A blood refrigerator was installed in the IAC. One day before the admission to the IAC for transfusion, a list of the transfusion recipients would be sent to BB. For recipients with valid type & screen results, blood units would be issued. Blood units for each recipient are kept separately to ensure no mixing up. On the day of transfusion, i.e., the next day, the porter would collect early in the morning from the BB in one batch all the blood units issued the day before and delivered to the IAC before patient admission.

#### **Result**

The new workflow was implemented on 13th October 2017. Up to the end of January 2018, 67 blood issue episodes involving 368 patients took place. This covered about 60% of recipients of transfusion in the IAC. The implementation allowed better preparedness for blood issue which results in: 1) more efficient blood transfusion,

improved patient flow and enhanced patient experience in the IAC, 2) drastic reduction in queueing time (mean time of 3 minutes c.f. maximum queueing time of 55 minutes before implementation) and fewer porter rounds, 3) less stressful working environment in BB and more training opportunity for young technical colleagues on blood issue. During the study period, no wrong blood issue was reported. Logistics on blood collection for type & screen shall be revised to increase coverage of the programme.